

Remarks

This Response accompanies a Request for Continued Examination (RCE) of the above application in response to the final Office Action mailed June 4, 2009, which provided a final rejection of all claims 1-21 and 23-31.

Claim amendments have been presented above to cancel without prejudice claims 1-15, to amend the language of previously presented claims 16-21 and 23-28, and to add new claims 32-41.

Independent method claim 16 now generally features “recovering the identifier tag from the second layer using a readback system which reads the second substrate; using the recovered identifier tag to access a database stored in computer memory to retrieve information from the database associated with the second layer; and using the retrieved information to verify the second layer corresponds to the first layer.” These features are supported including by the exemplary readback system 100 of FIG. 1, the layer testing block 206 of FIG. 9, the server 214 of FIG. 9 and the memory location 216 of FIG. 9. See also in the specification including at page page 7, line 31 to page 8, line 3; page 9, lines 26-29; page 10, lines 1-2; and page 10, lines 8-23.

The amendments to dependent claims 17-20 and 23-27 are supported including by the previously presented language of these claims, as well as in the foregoing drawings and excerpts from the specification.

Independent apparatus claim 28 now generally features “a computer system which stores a database in memory; and a readback system coupled to the computer system and configured to read the pits and lands in the second stamper to recover the identifier tag, to use the recovered identifier tag to access the database and retrieve information therefrom

associated with the second stamper, and to use the retrieved information to verify the second stamper corresponds to the first stamper.” Support includes that set forth above for claim 16, as well as FIG. 6, step 204 in FIG. 9, and in the specification at page 9, lines 5-12 (“*a quick verification of the ID tag on the first stamper 156 (or the second stamper 158) can confirm that the correct stamper is being used to provide the desired title, contents, revision level, etc. for the associated layers about to be formed.*”).

Dependent claims 29-31 depend from claim 28, and the amendments to these claims are supported as set forth above. New claims 32-36 also depend from claim 28 and are supported as set forth above.

New independent claim 37 is generally directed to a multi-layer optical disc featuring “a first layer which stores a first set of user data and a table of contents (TOC) for the disc; and a second layer aligned adjacent the first layer which stores a second set of user data and a second identifier tag which identifies the second layer as corresponding to the first layer, wherein a copy of the second identifier tag does not appear on the first layer.” Support includes the previously presented language of claim 8 as well as in FIGS. 4-5 and in the specification at page 7, line 31 to page 8, line 3 and page 8, lines 11-13 (“*The ID tag in field 152 on layer 0 can be the same as, or different from, the ID tag in field 150 on layer 1. In this way, accessing the ID tags can readily allow a determination that the particular layers 114, 116 belong together.*”)

New claims 38-41 depend from claim 37 and generally add further limitations with regard to the locations of various fields on the respective layers. Support includes FIGS. 2, 4-5; page 7, lines 19-24; and page 8, lines 4-10.

These amendments are proper, do not introduce new matter, and serve to place the application in proper condition for reconsideration and allowance.

Rejection of Claims Under 35 U.S.C. §103(a)

Claims 1-21 and 23-31 were finally rejected as being obvious over Lee '344 (US Published Patent Application No. US2003/0223344) in view of Kawamura '614 (US 6,424,614). This rejection is respectfully traversed and will be briefly discussed in view of the claim amendments set forth above.

The Applicant appreciates the Examiner's clarifying remarks regarding the relevance of the teachings of Kawamura '614 with regard to the previously presented claims. A review of Kawamura '614 shows that this reference teaches two alternative embodiments in FIGS. 3 and 10 with regard to the format and placement of table of contents (TOC) fields. See e.g., col. 2, lines 26-27 and lines 41-42.

The Applicant respectfully maintains that the first embodiment of FIG. 3 in Kawamura fails to teach or suggest the previously presented claim language for the reasons set forth in the previous response.

However, further study of the reference shows that the second embodiment of FIG. 10 appears to provide multiple copies of the same TOC on each layer in a multi-layer disc. A format of the so-called "first TOC sector layout" is shown in FIG. 11, which fills a sector of 2032 bytes. See e.g., FIG. 11 and col. 6, lines 48-58. Each of these TOCs on each layer include a 16-byte Volume ID field, a 2-byte Volume Set Size field, and a 2-byte Volume Sequence Number field. See FIG. 12 and col. 7, lines 5-7.

The skilled artisan would understand these to be ASCII type (ISO 646) coded fields, with the Volume ID field providing up to about 32 alphanumeric characters to describe the title of the disc (e.g., the name of the movie stored thereon, etc.). The Volume Set Size field indicates the number of discs in a multi-disc set (such as movie DVD sets with multiple discs), and the Volume Sequence Number indicates which disc the disc is in the set (e.g., the first disc, the second disc, etc.). See col. 7, lines 26-30. Thus, the Applicant generally agrees that the title information from the Volume ID field on layer 1 could be read and confirmed to match the title information on layer 0.

Kawamura appears to utilize these respective multiple copies of the same TOC during operation of the completed disc to enhance the ability to quickly change from one layer to the next during accesses to the data on the various layers. However, Kawamura does not appear to specifically address issues related to the manufacture of the discs which are solved by the present application. See e.g., specification, page 6, line 11 to page 7, line 10.

Accordingly, claim 16 has been amended to now generally feature “recovering the identifier tag from the second layer using a readback system which reads the second substrate; using the recovered identifier tag to access a database stored in computer memory to retrieve information from the database associated with the second layer; and using the retrieved information to verify the second layer corresponds to the first layer.”

This does not appear to be disclosed, taught or suggested by Kawamura or the other art of record, and advantageously enables the verification that the correct second layer will be affixed to the first layer (e.g., correct revision level, correct layer sequence, etc.). As can be appreciated, performing disc level testing of the various layers after the layers have already

been affixed together may result in the need to scrap an entire production run if an incorrect layer has been used.

Independent apparatus claim 28 is believed patentable for these same reasons. The optical disc claimed by independent claim 37 achieves these same benefits from the use of a unique identifier tag that does not appear on the first layer. This is further not taught or suggested by Kawamura inasmuch as Kawamura places the same TOC on each layer.

Favorable action on claims 16-21 and 23-41 are accordingly requested.

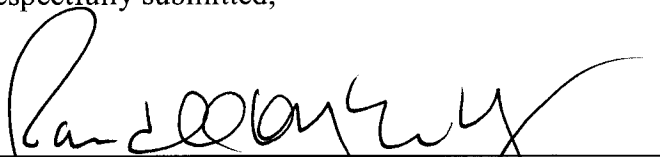
Conclusion

This Response in conjunction with the accompanying RCE are intended to be a complete response to the final Office Action mailed June 4, 2009. The Applicant requests reconsideration and allowance of all of the claims pending in the application.

Should any questions arise concerning this response, the Examiner is invited to contact the below signed attorney.

Respectfully submitted,

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